

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A fluorophosphate glass formed from a composition comprising ~~on a mol basis~~:

a metaphosphate, $\text{Ba}(\text{PO}_3)_2$, from 10 to 60 mol percent;

a metaphosphate, $\text{Al}(\text{PO}_3)_3$, from 10 to 60 mol percent;

a fluoride, BaF_2 , from 10 to 75 mol percent; and

a rare earth dopant.

22
Claim 2 (currently amended): A fluorophosphates glass formed from a composition comprising ~~on a mol basis~~:

a metaphosphate, $\text{Ba}(\text{PO}_3)_2$, from 10 to 60 mol percent;

a metaphosphate, $\text{Al}(\text{PO}_3)_3$, from 10 to 60 mol percent;

a fluoride, RF_x , from 10 to 75 mol percent, selected from the group of:

BaF_2 , CaF_2 , MgF_2 , PbF_2 and BiF_3 ; and

a dopant.

Claim 3 (canceled)

Claim 4 (original): The glass as in claim 2 wherein the dopant is selected from the group of: the rare earth elements neodymium (Nd), erbium (Er), ytterbium (Yb), thulium (Tm), terbium (Tb), holmium (Ho), praseodymium (Pr); an oxide of manganese (Mn); and mixtures thereof.

Claim 5 (original): The glass as in claim 4 wherein the dopant is selected from the oxides of the rare earth elements.

Claim 6 (currently amended): The glass as in claim 4 wherein the dopant on a ~~mol~~ weight percent basis is 2 to 15 percent.

Claim 7 (original): The glass as in claim 4 wherein the dopant is selected from the fluorides of the rare earth elements.

Claim 8 (currently amended): A fluorophosphate glass formed from a composition comprising ~~on a mol basis~~:

a metaphosphate, $\text{Ba}(\text{PO}_3)_2$, from 10 to 60 mol percent;

a metaphosphate, $\text{Al}(\text{PO}_3)_3$, from 10 to 60 mol percent;

a fluoride, BaF_2 , from 10 to 75 mol percent; and

a dopant, from 2 to 15 weight percent, selected from the group of:

B2
the oxides of the rare earth elements neodymium (Nd), erbium (Er), ytterbium (Yb), thulium (Tm), terbium (Tb), holmium (Ho), praseodymium (Pr);

an oxide of manganese (Mn); and mixtures thereof.

Claim 9 (currently amended): A fluorophosphate glass formed from a composition comprising ~~on a mol basis~~:

a metaphosphate, $\text{Ba}(\text{PO}_3)_2$, from ~~0~~ 5 to ~~100~~ 90 mol percent;

a metaphosphate, $\text{Al}(\text{PO}_3)_3$, from ~~0~~ 5 to ~~100~~ 90 mol percent;

a fluoride, BaF_2 , from 5 to 30 mol percent; and

a dopant, from 2 to 15 weight percent, selected from the group of:

the oxides of the rare earth elements neodymium (Nd), erbium (Er), ytterbium (Yb), thulium (Tm), terbium (Tb), holmium (Ho), praseodymium (Pr);

an oxide of manganese (Mn); and mixtures thereof.

Claim 10 (currently amended): A fluorophosphate glass formed from a composition comprising ~~on a mol basis~~:

a metaphosphate, $\text{Ba}(\text{PO}_3)_2$, from ~~0~~ 10 mol to 45 mol percent;

a metaphosphate, $\text{Al}(\text{PO}_3)_3$, from 5 to 30 mol percent;

a fluoride, BaF_2 , from 45 to 75 mol percent; and

a dopant, from 2 to 15 weight percent, selected from the group of:
the oxides of the rare earth elements neodymium (Nd), erbium (Er), ytterbium (Yb), thulium (Tm), terbium (Tb), holmium (Ho), praseodymium (Pr);

an oxide of manganese (Mn); and mixtures thereof.

Claim 11 (currently amended): A fluorophosphate glass formed from a composition comprising ~~on a mol basis~~:

a metaphosphate, $\text{Ba}(\text{PO}_3)_2$, approximately 10 mol percent;

a metaphosphate, $\text{Al}(\text{PO}_3)_3$, approximately 18 mol percent;

a fluoride, BaF_2 , approximately ~~70~~ 72 mol percent; and

a dopant, approximately ~~2~~ 10 weight percent:

of the oxide of neodymium (Nd).

Claim 12 (currently amended): A fluorophosphate glass formed from a composition comprising ~~on a mol basis~~:

a metaphosphate, $\text{Ba}(\text{PO}_3)_2$, approximately 10 mol percent;

a metaphosphate, $\text{Al}(\text{PO}_3)_3$, approximately 18 mol percent;

a fluoride, BaF_2 , approximately ~~70~~ 72 mol percent; and

a dopant, approximately ~~2~~ 20 percent:

of the oxide of erbium (Er).

Claim 13 (withdrawn)

Claim 14 (withdrawn)

Claim 15 (withdrawn)

Claim 16 (currently amended): A fluorophosphate glass formed from a composition comprising ~~on a mol basis~~:

a metaphosphate, $\text{Ba}(\text{PO}_3)_2$, from 10 to 60 mol percent;

a metaphosphate, $\text{Al}(\text{PO}_3)_3$, from 10 to 60 mol percent;

a fluoride, $\text{BaF}_2 + \text{RFx}$ wherein RFx is selected from the group of CaF_2 , MgF_2 , PbF_2 , and BiF_3 , from 10 to 90 mol percent; and
a dopant.

Claim 17 (cancelled)

Claim 18 (original): The glass as in claim 16 wherein the dopant is selected from the group of:
the rare earth elements neodymium (Nd), erbium (Er), ytterbium (Yb), thulium (Tm),
terbium (Tb), holmium (Ho), samarium (Sm), europium (Eu), praseodymium (Pr); an oxide of
manganese (Mn); and mixtures thereof.

Claim 19 (original): The glass as in claim 18 wherein the dopant is selected from the oxides of
the rare earth elements.

B22 Claim 20 (currently amended): The glass as in claim 18 wherein the dopant on a mol weight
percent basis is 2 to 15 percent.

Claim 21 (original): The glass as in claim 18 wherein the dopant is selected from the fluorides
of the rare earth elements.

Claim 22 (currently amended): A fluorophosphate glass formed from a composition
comprising ~~on a mol basis~~:

a metaphosphate, $\text{Ba}(\text{PO}_3)_2$, from 5 to 60 mol percent;

a metaphosphate, $\text{Al}(\text{PO}_3)_3$, from 5 to 60 mol percent;

a fluoride, $\text{BaF}_2 + \text{RFx}$ wherein RFx is selected from the group of CaF_2 , MgF_2 ,
 PbF_2 and BiF_3 , from 10 to 90 mol percent; and

a dopant, from 2 to 20 weight percent, selected from the group of:
the oxides of the rare earth elements neodymium (Nd), erbium (Er), ytterbium (Yb), thulium
(Tm), terbium (Tb), holmium (Ho), praseodymium (Pr), samarium (Sm), europium (Eu);
an oxide of manganese (Mn); and mixtures thereof.

Claim 23 (currently amended): A fluorophosphate glass formed from a composition

comprising ~~on a mol basis~~:

a metaphosphate, $\text{Ba}(\text{PO}_3)_2$, from 0_5 to 100_90 mol percent;

a metaphosphate, $\text{Al}(\text{PO}_3)_3$, from 0_5 to 100_90 mol percent;

a fluoride, $\text{BaF}_2 + \text{RFx}$ wherein RFx is selected from the group of CaF_2 , MgF_2 , PbF_2 and BiF_3 , from 5 to 90 mol percent; and

a dopant, from 2 to 20 weight percent, selected from the group of:

the oxides of the rare earth elements neodymium (Nd), erbium (Er), ytterbium (Yb), thulium (Tm), terbium (Tb), holmium (Ho), praseodymium (Pr), samarium (Sm), europium (Eu);

an oxide of manganese (Mn); and mixtures thereof.

B2 Claim 24 (currently amended): A fluorophosphate glass formed from a composition comprising ~~on a mol basis~~:

a metaphosphate, $\text{Ba}(\text{PO}_3)_2$, from 0_10 to 45 mol percent;

a metaphosphate, $\text{Al}(\text{PO}_3)_3$, from 5 to 30 mol percent;

a fluoride, $\text{BaF}_2 + \text{RFx}$ wherein RFx is selected from the group of CaF_2 , MgF_2 , PbF_2 and BiF_3 , from 45 to 90 mol percent; and

a dopant, from 2 to 20 weight percent, selected from the group of:

the oxides of the rare earth elements neodymium (Nd), erbium (Er), ytterbium (Yb), thulium (Tm), terbium (Tb), holmium (Ho), praseodymium (Pr), samarium (Sm), europium (Eu);

an oxide of manganese (Mn); and mixtures thereof.

Claim 25 (currently amended): A fluorophosphate glass formed from a composition comprising ~~on a mol basis~~:

a metaphosphate, $\text{Ba}(\text{PO}_3)_2$, approximately 10 mol percent;

a metaphosphate, $\text{Al}(\text{PO}_3)_3$, approximately 18 mol percent;

a fluoride, $\text{BaF}_2 + \text{RFx}$ wherein RFx is selected from the group of CaF_2 , MgF_2 , PbF_2 and BiF_3 , approximately 90_80 mol percent; and

a dopant, approximately 5 weight percent:

of the oxide of neodymium (Nd).

Claim 26 (currently amended): A fluorophosphate glass formed from a composition comprising ~~on a mol basis~~:

a metaphosphate, $\text{Ba}(\text{PO}_3)_2$, approximately 10 mol percent;

a metaphosphate, $\text{Al}(\text{PO}_3)_3$, approximately 18 mol percent;

a fluoride, $\text{BaF}_2 + \text{RFx}$ wherein RFx is selected from the group of CaF_2 , MgF_2 ,

B2 Cont
 PbF_2 and BiF_3 , approximately ~~90~~ 80 mol percent; and

a dopant, approximately 10 weight percent:

of the oxide of erbium (Er).

Claim 27 (withdrawn)

Claim 28 (withdrawn)

Claim 29 (withdrawn)